Complete Summary

GUIDELINE TITLE

Psoriasis.

BIBLIOGRAPHIC SOURCE(S)

Finnish Medical Society Duodecim. Psoriasis. Helsinki, Finland: Duodecim Medical Publications Ltd.; 2002 May 7. Various p.

COMPLETE SUMMARY CONTENT

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SCOPE

DISEASE/CONDITION(S)

Psoriasis

GUIDELINE CATEGORY

Diagnosis
Treatment

CLINICAL SPECIALTY

Dermatology
Family Practice
Internal Medicine

INTENDED USERS

Health Care Providers
Physicians

GUIDELINE OBJECTIVE(S)

Evidence-Based Medicine Guidelines collects, summarizes, and updates the core clinical knowledge essential in general practice. The guidelines also describe the scientific evidence underlying the given recommendations.

TARGET POPULATION

Patients who have psoriasis or cutaneous lesions suspicious for psoriasis

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis

1. Assessment of clinical features and patterns of cutaneous lesions
2. Assessment for family history of psoriasis
3. Biopsy, if needed

Treatment

1. No treatment, if minor localized psoriasis on the elbows or knees
2. Base creams or ointments (oily preparations containing 5% salicylic acid [Acid salic 5.0/Vaselin alb. Ad 100 MDS])
3. Topical corticosteroids
4. Preparations of tar in various bases
5. Dithranol (Anthralin)
6. New topical treatments (calcipotriol, tazarotene)
7. Phototherapy and photochemotherapy
    - Selective ultraviolet phototherapy (SUP) and ultraviolet B (UVB)-phototherapy in combination with a systemic retinoid and with suitable concomitant topical antipsoriatic treatments.
    - Photochemotherapy with pulsed ultraviolet actinotherapy (PUVA) (photosensitizer tablet-PUVA; bath-PUVA).
8. Systemic treatments, including acitretin, etretinate, methotrexate, hydroxyurea, cyclosporine, fumarates, and sulfasalazine, azathioprine
9. Referral to specialist

Note: Anti-streptococcal therapy is considered but not recommended.

MAJOR OUTCOMES CONSIDERED

- Psoriasis clearance rate
- Remission rate
- Adverse effects of (tolerance to) treatment

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Hand-searches of Published Literature (Secondary Sources)
Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

The evidence reviewed was collected from the Cochrane database of systematic reviews and the Database of Abstracts of Reviews of Effectiveness (DARE). In addition, the Cochrane Library and medical journals were searched specifically for original publications.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Levels of Evidence

A: Strong research-based evidence. Several relevant, high-quality scientific studies with homogeneous results.

B: Moderate research-based evidence. At least one relevant, high-quality study or multiple adequate studies.

C: Limited research-based evidence. At least one adequate scientific study.

D: No scientific evidence. Expert panel evaluation of other information.

METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not applicable

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not stated

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Please note: This guideline has been updated. The National Guideline Clearinghouse (NGC) is working to update this summary. The recommendations that follow are based on the previous version of the guideline.

The levels of evidence [A-D] supporting the recommendations are defined at the end of the "Major Recommendations" field.

Definition and Incidence

Psoriasis is a chronic disease of the skin, characterized by well-defined erythematous plaques bearing adherent, silvery scales. Studies have shown a genetic predisposition to psoriasis with evidence for an autosomal dominant gene with reduced penetrance (Henseler, 1994; Swanbeck et al., 1994). The disease is often triggered by an external factor.

The incidence of psoriasis in Scandinavia and western Europe is between about 1.5-3%. It may start at any age but is rare under 5 years. Evaluation of the onset age reveals two peaks: an early one at 16-22 years and a later one at 57-60 years (Henseler & Christophers, 1985).

Clinical Features

- The correct diagnosis is easily made from the characteristic cutaneous lesions of psoriasis
    - The single lesion is sharply demarcated and covered with silvery-white scales.
    - Glossy erythema with blood droplets (pinpoint hemorrhagies) are observed under the skin.
    - The elbows, knees, legs, lower back and scalp are sites of predilection.
    - Involvement of the nails is common.
        - Pits within the nail plate ("pitting")
        - Separation of the distal nail from the nail bed (onycholysis), yellowish macules beneath the nail plate ("oily macules") and subungual hyperkeratosis.

Common Patterns of Psoriasis

- The most common type is plaque psoriasis, which is stationary with clear-cut borders and often covered with thick scales.
- Guttate psoriasis or Ps. guttata is often triggered by tonsillitis. Small round red macules are suddenly disseminated all over the body. Patients respond well to phototherapy (Griffiths et al., 2000; Spuls et al., 1997; DARE, 2000) [A].
- Flexural psoriasis or Ps. inversa is localized in the main skin folds (genitocrural, navel, axilla, submammary).
- Erythrodermic psoriasis may be generalized and is most refractory to treatments. It may also appear in a pustular form (Ps. pustulosa).

Differential Diagnosis

- The cutaneous lesions characteristic of the disease and permit to make the diagnosis.
- A family history of psoriasis may help in diagnosis: approximately every second patient reports an affected relative (Swanbeck et al., 1997).
- A biopsy is seldom necessary to establish the diagnosis.

Scalp

- In seborrhoeic eczema dandruff is thinner, more greasy and responds better to treatment. It is often difficult to differentiate seborrhoeic eczema from psoriasis unless psoriasis is found in other regions.
- Fungal infection of the scalp occurs seldom, and usually affects children. Microscopic examination and culture of skin scrapings and plucked hairs help in making the diagnosis.
- Neurodermatitis of nuchae (lichen simplex) is a single, itchy, often lichenified plaque covered with thin scales.

Flexures

- Seborrhoeic eczema may resemble flexural psoriasis. Examine other skin sites. It is not necessary to differentiate these two conditions as the treatment is the same.
- Fungal infection (tinea) may resemble psoriasis; however, it usually heals in the centre and expands peripherally.
- Candidiasis in body folds is seldom seen in the age groups of psoriatic patients. It presents as a moist glazed area of erythema and maceration with outlying "satellite papulopustules".
- Erythrasma is a symptom-free macular brown area, most often found in the armpits or groins. It is caused by overgrowth of difteroids of the normal skin flora. These area fluoresce coral pink with long-wave ultraviolet radiation (WoodÂ´s light).

Hands, Feet

- Hyperkeratotic eczema in the palms and soles and palmoplantar pustulosis may be difficult to differentiate from psoriasis. Examine the entire skin.
- Fungal infection can be easily diagnosed with microscopic examination and culture.

Treatment

- Treatment of choice depends on the extension and site of the lesions, on the age of the patient and on response to earlier treatments.
- It is not necessary to treat minor localized psoriasis on the elbows or the knees.
- Base creams or ointments may be used after all treatment forms. They are also used to remove scales from the scalp (plenty of base cream or ointment is rubbed into the scalp over night and washed out in the morning). Oily preparations containing 5% salicylic acid are useful for removing the scales from the lesions localized on the trunk or extremities (Acid salic 5.0/Vaselin alb. Ad 100 MDS).
- Topical corticosteroids (Mason J, Mason AR, & Cork, 2002) [A] in ointment form (unguentum) are more effective than creamy ones. Only weak topical steroids (class II) should be used on the face and flexures. On the other sites only potent or very potent topical steroids (class III-IV) are efficient enough (Henseler & Christophers, 1985; Swanbeck et al., 1997). Scalp tolerates well a long-term use of topical steroid (Jacobson, Cornell, & Savin, 1986; Olsen et al., 1991). Otherwise the use of topical steroid has to be restricted: a one week course of topical steroid at the most must be followed by a course of an equal duration of a base ointment, cream or other topical treatment. Topical or systemic corticosteroids must not be used in extensive psoriasis, as the disease may progress to an unstable erythrodermic or pustular phase, which is difficult to manage.
- Preparations of tar in various bases are suitable to extensive guttate psoriasis or after other treatment forms (Tham, Lun, & Cheong, 1994).
- Dithranol (Anthralin) is used as a short contact treatment. High-strength (1 to 3%) dithranol in petroleum jelly is applied and left on for 20 to 30 min (Runne & Kunze, 1982).
- Two new topical treatments for mild to moderate chronic plaque psoriasis have been introduced recently.
    - Calcipotriol (Ashcroft et al., 2000; DARE, 2001) [A], a vitamin D analogue is licensed as an ointment and cream and as a solution for the scalp. The maximum weekly dose is 100 g of the 50 micrograms/g ointment, cream or solution (Kragballe, Beck, & Sogaard, 1988; Kragballe, 1989; Dubertret et al., 1992; Highton, Quell, & the Calcipotriene Study Group, 1995). Combining calcipotriol treatment with a potent topical corticosteroid is more effective than either component alone (Lebwohl et al., 1996).
    - Tazarotene is a new topically applied retinoid used as a gel once daily (Weinstein et al., 1997) [B] alone or in combinations with corticosteroid cream (Lebwohl et al., 1998; Gollnick & Menter, 1999). The addition of a potent topical corticosteroid to tazarotene therapy significantly increases the treatment success rate compared with tazarotene alone. Both calcipotriol and tazarotene have been shown to be as effective as class III topical steroids in the treatment of mild to moderate plaque psoriasis (Kragballe et al., 1991; Cunliffe et al., 1992; Molin et al., 1997; Bruce et al., 1994; Lebwohl et al., 1998).

Phototherapy and Photochemotherapy

- Phototherapy is used in extensive psoriasis (>20 % of the body surface) (Griffiths et al., 2000; Spuls et al., 1997; DARE, 2000) [A].
- Selective ultraviolet phototherapy (SUP) (Meffert, Metz, & Sönnichsen, 1981; Pinzer, Kadner, & Kleine-Natrop, 1981) and ultraviolet B (UVB)-phototherapy (Spuls et al., 1997) are particularly beneficial in superficial types of psoriasis, such as guttate psoriasis and other less scaly forms. Selective ultraviolet phototherapy and ultraviolet B (Lowe et al., 1991; Green et al., 1992) are most often combined with a systemic retinoid and with suitable concomitant topical antipsoriatic treatments.
- Photochemotherapy with pulsed ultraviolet actinotherapy (PUVA) (Spuls et al. 1997) is the most effective form of phototherapy (Griffiths et al., 2000; Spuls et al., 1997; DARE, 2000) [A]. Treatment can be administered either orally (photosensitizer tablet-PUVA) (Spuls et al., 1997) or by dissolving the agent into bathwater (bath-PUVA) (Hannuksela & Karvonen, 1978; Salo, Lassus, & Taskinen, 1981). RePUVA (Green et al., 1992; Saurat et al., 1988) consists of PUVA combined with concomitant oral retinoid.
- Indications, suitable doses and frequency of exposure to phototherapies and concomitant treatments require the experience of a dermatologist. PUVA and retinoids can only be described by dermatologists.

Systemic Treatments

- Acitretin, (Spuls et al., 1997) etretinate (Griffiths et al., 2000) [A], methotrexate (Griffiths et al., 2000) [C], hydroxyurea (Griffiths et al., 2000) [C], cyclosporine (Griffiths et al., 2000) [A] (Spuls et al., 1997), fumarates (Griffiths et al., 2000) [B], and sulfasalazine (Griffiths et al., 2000) [B] may be prescribed by a dermatologists to patients with severe psoriasis. Also azathioprine (Griffiths et al., 2000) [D] is rarely used. These are not routine therapies, but may be used to preserve the patient's ability to work and help avoid long hospitalization. The administration of these modalities requires special experience and regular follow-up.

Referral to Specialist

- Children suffering from psoriasis and adults requiring combination treatment regimens or suffering from severe psoriasis that does not respond to usual treatment modalities, should be referred to a dermatologist.
- Instructing the patient is very important. Mere biopsy is not sufficient for making the diagnosis. An experienced dermatologist can be invaluable in making the diagnosis and planning the treatment.

Related Evidence

- There is no evidence supporting antistreptococcal interventions in psoriasis (Owen et al., 2002) [C].

Definitions:

Levels of Evidence

A: Strong research-based evidence. Several relevant, high-quality scientific studies with homogeneous results.

B: Moderate research-based evidence. At least one relevant, high-quality study or multiple adequate studies.

C: Limited research-based evidence. At least one adequate scientific study.

D: No scientific evidence. Expert panel evaluation of other information.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

REFERENCES SUPPORTING THE RECOMMENDATIONS

References open in a new window

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

Concise summaries of scientific evidence attached to the individual guidelines are the unique feature of the Evidence-Based Medicine Guidelines. The evidence summaries allow the clinician to judge how well-founded the treatment recommendations are. The type of supporting evidence is identified and graded for select recommendations (see the "Major Recommendations" field).

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Accurate diagnosis and effective treatment of psoriasis

POTENTIAL HARMS

Side Effects of Medication

- Calcipotriol. In a systematic review, calcipotriol was found to cause significantly more skin irritation than topical corticosteroids.
- Sulphasalazine. In one randomized controlled trial (RCT), the efficacy of sulphasalazine was offset to a degree by patient intolerance and side effects, particularly nausea, vomiting and rashes.
- Phototherapy. Phototherapy is associated with erythema.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness
Safety

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Finnish Medical Society Duodecim. Psoriasis. Helsinki, Finland: Duodecim Medical Publications Ltd.; 2002 May 7. Various p.

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2002 May 7

GUIDELINE DEVELOPER(S)

Finnish Medical Society Duodecim - Professional Association

SOURCE(S) OF FUNDING

Finnish Medical Society Duodecim

GUIDELINE COMMITTEE

Editorial Team of EBM Guidelines

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Primary Author: Inkeri Helander

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

Please note: This guideline has been updated. The National Guideline Clearinghouse (NGC) is working to update this summary.

GUIDELINE AVAILABILITY

This updated guideline is included in a CDROM titled "EBM Guidelines. Evidence-Based Medicine" available from Duodecim Medical Publications, Ltd, PO Box 713, 00101 Helsinki, Finland; e-mail: info@ebm-guidelines.com; Web site: www.ebm-guidelines.com.

AVAILABILITY OF COMPANION DOCUMENTS

- EBM guidelines. Evidence-based medicine. Helsinki, Finland: Duodecim Medical Publications, Ltd. 2002. [CDROM]
- EBM guidelines. Web site: www.ebm-guidelines.com.

Available from: Duodecim Medical Publications, Ltd, PO Box 713, 00101 Helsinki, Finland; e-mail: info@ebm-guidelines.com; Web site: www.ebm-guidelines.com.

PATIENT RESOURCES

None available

NGC STATUS

This summary was completed by ECRI on December 17, 2002. The information was verified by the guideline developer as of February 7, 2003.

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